AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-47 (Cancelled).

48. (Currently Amended) A cable comprising at least one core comprising at least one transmissive element and at least one coating layer made from a coating material, comprising:

at least a first polyethylene having a density not higher than 0.940 g/cm^3 and a Melt Flow Index (MFI), measured at 190°C with a load of 2.16 Kg according to ASTM 01238-00 standard, of ~~0.05 g/10' to 2 g/10'~~ 0.1 g/10 min to 1g/10 min, said first polyethylene being obtained from a waste material; and

at least a second polyethylene having a density higher than 0.940 g/cm^3.

49. (Previously Presented) The cable according to claim 48, wherein said first polyethylene has a density not lower than 0.910 g/cm^3.

50. (Previously Presented) The cable according to claim 48, wherein said first polyethylene has a density of 0.915 g/cm^3 to 0.938 g/cm^3.

51. (Cancelled).

52. (Previously Presented) The cable according to claim 48, wherein said second polyethylene has a density not higher than 0.970 g/cm^3.

53. (Previously Presented) The cable according to claim 48, wherein said second polyethylene has a density of between 0.942 g/cm^3 to 0.965 g/cm^3.

54. (Previously Presented) The cable according claim 48 , wherein said coating layer is a cable external layer having a protective function.

55. (Previously Presented) The cable according to claim 48, wherein said first polyethylene has a melting point lower than 130°C.

56. (Previously Presented) The cable according to claim 55, wherein said first polyethylene has a melting point of 100°C to 125°C.

57. (Previously Presented) The cable according to claim 48, wherein said first polyethylene has a melting enthalpy of 50 J/g to 150 J/g.

58. (Previously Presented) The cable according to claim 57, wherein said first polyethylene has a melting enthalpy of 80 J/g to 140 J/g.

59. (Currently Amended) The cable according to claim 48, wherein said first polyethylene comprises a carbon black in an amount higher than 2% by weight with respect to the total weight of the first polyethylene.

60. (Currently Amended) The cable according to claim 59, wherein said first polyethylene comprises a carbon black in an amount of 2.5% by weight to 4.0% by weight with respect to the total weight of the first polyethylene.

61. (Previously Presented) The cable according to claim 48, wherein said first polyethylene is selected from low density polyethylene (LOPE), linear low density polyethylene (LLDPE), very low density polyethylene (VLDPE), or mixtures thereof.

62. (Previously Presented) The cable according to claim 61, wherein said first polyethylene is selected from mixtures of low density polyethylene with an amount not higher than 15% by weight with respect to the total weight of the polyethylene, of linear low density polyethylene.

63. (Previously Presented) The cable according to claim 48, wherein said first polyethylene is present in the coating material in an amount of 30% by weight to 90% by weight with respect to the total weight of the coating material.

64. (Previously Presented) The cable according to claim 63, wherein said first polyethylene is present in the coating material in an amount of 40% by weight to 60% by weight with respect to the total weight of the coating material.

65. (Currently Amended) The cable according to claim 48, wherein said second polyethylene has a Melt Flow Index (MFI), measured at 190° C with a load of 2.16 Kg according to ASTM 01238-00 standard, of ~~0.05 g/10' to 2 g/10'~~0.05 g/10 min to 2 g/10 min.

66. (Currently Amended) The cable according to claim 48, wherein said second polyethylene has a Melt Flow Index (MFI), measured at 190°C with a load of 2.16 Kg according to ASTM 01238-00 standard, of ~~0.1 g/10' to 1 g/10'~~0.1 g/10 min to 1 g/10 min.

67. (Previously Presented) The cable according to claim 48, wherein said second polyethylene has a melting point higher than 120°C.

68. (Previously Presented) The cable according to claim 67, wherein said second polyethylene has a melting point of 125°C to 165°C.

69. (Previously Presented) The cable according to claim 48, wherein said second polyethylene has a melting enthalpy of 125 J/g to 200 J/g.

70. (Previously Presented) The cable according to claim 69, wherein said second polyethylene has a melting enthalpy of 130 J/g to 185 J/g.

71. (Previously Presented) The cable according to claim 48, wherein said second polyethylene is a polyethylene obtained from waste material.

72. (Currently Amended) The cable according to claim 71, wherein said second polyethylene ~~obtained from waste material~~ comprises an amount not higher than 15% by weight with respect to the total weight of the polyethylene, of polypropylene.

73. (Previously Presented) The cable according to claim 48, wherein said second polyethylene is present in the coating material in an amount of 10% by weight to 70% by weight with respect to the total weight of the coating material.

74. (Previously Presented) The cable according to claim 73, wherein said second polyethylene is present in the coating material in an amount of 40% by weight to 60% by weight with respect to the total weight of the coating material.

75. (Previously Presented) The cable according to claim 48, wherein said coating material comprises carbon black.

76. (Previously Presented) The cable according to claim 75, wherein said carbon black is added to the coating material in an amount of 2% by weight to 5% by weight with respect to the total weight of the coating material.

77. (Previously Presented) The cable according to claim 76, wherein said carbon black is added to the coating material in an amount of 2.5% by weight to 4.0% by weight with respect to the total weight of the coating material.

78. (Previously Presented) The cable according to claim 48, wherein said coating material is crosslinked.

79. (Previously Presented) The cable, according to claim 48, wherein said coating material is not crosslinked.

80. (Currently Amended) A process for producing a cable comprising at least one core comprising at least one transmissive element and at least one coating layer made from a coating material, comprising the steps of:

providing at least a first polyethylene having a density not higher than 0.940 g/cm^3 and a Melt Flow Index (MFI), measured at 190°C with a load of 2.16 Kg according to ASTM 01238-00 standard, of ~~0.05 g/10' to 2 g/10'~~0.05 g/10 min to 2 g/10 min, in a subdivided form, said first polyethylene being obtained from a waste material;

providing at least a second polyethylene having a density higher than 0.940

g/cm^3, in a subdivided form;

conveying at least one core comprising at least one transmissive element into an extruding apparatus comprising a housing and at least one screw rotatably mounted into said housing, said housing including at least a feed hopper and at least a discharge opening;

feeding said first and second polyethylenes to said extruding apparatus;

melting and mixing said first and second polyethylenes in said extruding apparatus to form a homogeneous mixture;

filtering said mixture; and

depositing said mixture onto said core comprising at least one transmissive element so as to obtain the coating layer.

81. (Previously Presented) The process for producing a cable according to claim 80, wherein said first polyethylene has a density not lower than 0.910 g/cm^3.

82. (Previously Presented) The process for producing a cable according to claim 80, wherein said first polyethylene has a density of 0.915 g/cm^3 to 0.938 g/cm^3.

83. (Currently Amended) The process for producing a cable according to claim 80, wherein said first polyethylene has a Melt [[Plow]]Flow Index (MFI), measured at 190°C with a load of 2.16 Kg according to ASTM 01238-00 standard, of ~~0.1 g/10' to 1 g/10'~~0.1 g/10 min to 1 g/10 min.

84. (Previously Presented) The process for producing a cable according to claim 80, wherein said second polyethylene has a density not higher than 0.970 g/cm^3.

85. (Previously Presented) The process for producing a cable according to claim 80, wherein said second polyethylene has a density of 0.942 g/cm^3 to 0.965 g/cm^3.

86. (Previously Presented) The process for producing a cable according to claim 80, wherein said extruding apparatus is a single-screw extruder.

87. (Previously Presented) The process for producing a cable according to claim 80, wherein said melting and mixing is carried out at a temperature of 150°C to 250°C.

88. (Previously Presented) The process for producing a cable according to claim 87, wherein said melting and mixing is carried out at a temperature of 120°C to 230°C.

89. (Previously Presented) The process for producing a cable according to claim 80, wherein said first polyethylene and said second polyethylene are premixed before the step of feeding them to the extruding apparatus.

90. (Previously Presented) The process for producing a cable according to claim 80, wherein said first polyethylene has a melting point lower than 130°C.

91. (Currently Amended) The process for producing a cable according to claim 80, wherein said second polyethylene has a Melt Flow Index, measured at 190°C with a load of 2.16 Kg according to ASTM 01238-000 standard, of ~~0.05 g/10' to 2 g/10'~~0.05 g/10 min to 2 g/10 min.

92. (Previously Presented) The process for producing a cable according to claim 80, wherein said first polyethylene is obtained from a waste material in a subdivided form by means of a process comprising the following steps:

(a) sorting out the impurities optionally present in a waste material;

(b) feeding the waste material obtained in step (a) to a mill obtaining flakes having an average diameter of about 0.1 cm to about 2.0 cm;

(c) washing the flakes obtained in step (b) in water and filtering the same in order to discard the impurities having a density higher than 1 kg/l;

(d) drying the flakes obtained in step (c) with warm and dry air;

(e) feeding the dried flakes obtained in step (d) to an extruding apparatus comprising a housing and at least one screw rotatably mounted in said housing, including at least a feed hopper and a discharge opening;

(f) melting and mixing said flakes obtaining a homogeneous mixture;

(g) filtering and granulating the homogeneous mixture obtained in step (f) obtaining a product in a subdivided form;

(h) cooling the product in a subdivided form obtained in step (g); and

(i) drying the cooled product obtained in step (h) with warm and dry air.

93. (Previously Presented) The process for producing a cable according to claim 92, wherein the homogeneous mixture obtained in step (f) is fed to a second extruding apparatus.

94. (Previously Presented) The process for producing a cable according to claim 92, wherein said extruding apparatus is a single-screw extruder.